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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/114,203

07/13/1998

ATSUSHI MIYANISHI

030682-066

8932

21839

7590

10/19/2005

BUCHANAN INGERSOLL PC
(INCLUDING BURNS, DOANE, SWECKER & MATHIS)
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER

JACKSON JR, JEROME

ART UNIT

PAPER NUMBER

2815

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary

Application No.

09/114,203

Applicant(s)

MIYANISHI ET AL.

Examiner

Jerome Jackson Jr.

Art Unit

2815

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 25-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 25-36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claims recite gate electrodes which are directly adjacent one another. The original interpretation of this feature was apparently an understanding that there were no other gate electrodes between the two gates of the claim. The arguments applicants are making in the remarks appear to imply that there is no structure at all between the two gates, i.e. they are either touching or there are no other metallization structures or contacts or perhaps semiconductor material between the two gates of the claims. If applicant implies this type of "adjacent structure" it is either new matter or not properly described in the specification to enable one of ordinary skill to ascertain the scope of the claims. From the figures it appears that the gates are next to one another, however, there is no definitive structure shown which delineates the other metallization layers such as source and drain contacts and other metalizations which necessarily must exist in a working device and are not shown in the bald figures of applicant's drawings. Shou shows the source and drain metalizations and applicant is

apparently trying to distinguish over Shou by stating his gates are not adjacent because there are s/d metalizations between the gates. Applicant's figures do not show the s/d metalizations, however, the drawings are incomplete and there is no way to know whether or not same s/d metalizations exist in applicant's structure. At best "adjacent" gates in applicant's claims can only be interpreted as having no other gates between the two claimed. There is also no exact original language for the limitation "directly adjacent" and no way to exactly ascertain what is intended by such language, especially in view of applicant's arguments. Accordingly, the language is considered new matter.

Claims 25-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For the same reasons the claims are considered new matter they are considered vague and indefinite of exact structure.

Claims 25-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shou, Bergemont and Jassowski, of record.

The previous rejection applies as the new changes in claim 31 clarify the structure without substantially changing its scope. The other claims have not been amended.

Applicant's arguments filed 6/29/05 have been fully considered but they are not persuasive. Applicant argues that there is intervening structure between the gate electrodes of Shou. This argument is unpersuasive of patentability as the gate electrodes of Shou are directly adjacent each other, i.e. there are no intervening gate

electrodes between the stated ones. Furthermore, there is such ambiguity over what defines "directly adjacent" in the claims that a meaningful determination of the claim scope cannot be made. Arguing that Shou shows "contacts" between the gates is unpersuasive of patentability because it cannot be determined where applicant's s/d contacts are, and furthermore, it cannot be determined that regardless of such contacts the gates of Shou may still be considered "directly adjacent" gates. "Directly adjacent" in the claims is not properly defined in light of applicant's arguments.

Arguments regarding "directly adjacent" in relation to Bergemont are also unconvincing of patentability for the above reasons.

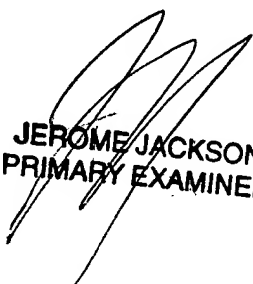
Arguments regarding gate G' in Jassowski are also unconvincing of patentability as the referred to metallization G' can be labeled a word line as it apparently is not located between s/d regions in the area of concern. However, if considered a gate line in the concerned area it appears to extend a larger distance from edge E3 and meets the claim language in that it also is "adjacent" gate G3. In any event, the limitation "directly adjacent" is considered vague and indefinite at best and new matter at worst and does not structurally distinguish the claims over Jassowski. Furthermore the rejection included considerations of gates G1 and G2 and there is no refutation of the applicability of this rejection. The extension of gate G1 beyond the edge of E5 and E6 is not argued to be unsupported by the specification of Jassowski, nor is there any argument refuting the examiner's interpretation of the figure other than a "directly adjacent" argument which is unconvincing of patentability. As such the rejections are maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Jackson Jr. whose telephone number is 571-272-1730. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571-272-1664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jj


JEROME JACKSON
PRIMARY EXAMINER